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PRINCIPAL DIMENSIONS AND SHIPBUILDING ELEMENTS

No.	Elements	Unit of measurement	Designed	Obtained at trials
1	Length overall with aft diving and ancillary appliance CDY	m	71.75	71.72
2	Overall length of the hull	m	70.3	70.28
3	Length on designed waterline (DWL)	m	65.0	65.0
4	Beam on designed waterline, midships	m	9.4	9.40
5	Beam (with rubbing strakes)	m	9.6	9.605
6	Depth above BL:			
	at the bow	m	8.2	8.2
	midships up to upper deck (MD)	m	4.4	4.4
	at the stern	m	4.95	4.95
7	Height from BL without masts	m	11.7	11.7
8	Height from BL with masts	m	18.3	18.3
9	Standard displacement:	t	844	808
	draft forward	m	2.16	2.17
	mean draft	m	2.52	2.44
	draft aft	m	2.82	2.67
10	Full speed at normal displacement with equipment	knots	17.0	17.6
11	Operational speed	knots	12.0	12.7
12	Minimum speed	knots	2 - 4	2 - 4
13	Cruising range at operational speed	miles	2500	2530
14	Endurance	days	10	10
15	Seaworthiness at any displacement, except for standard one	wind force	up to 10	10
16	Seaworthiness at standard displacement	wind force	up to 9	9

Note: At the ambient temperature of + 32°C the cruising range at the operational speed is 2000 miles

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ADDITIONAL DATA

ON DIVING AND ANCILLARY APPLIANCE COV

ELECTRICAL EQUIPMENT

SINE DIVING AND ANCILLARY APPLIANCE

No.	Description	Electric Motor Type	Power	Qnty	Control Equipment Description	Type	Qnty	Location	Power Source
1	Rescue bell winch ЛЭГР-5/1-1	МАП -52/4/12/24К	20/7.2/2.2	1	Magnetic controller Cam controller	ВТ-73 КВ-0014	1 1	Suprstr top, UD	Board No. 8 ш
2	Unloading rope winches ЛЭ С3-1 and ЛЭ С3-2	МАП -22--4/12К	5/1.7	2	Cam controller	КВ-1523	2	Suprstr top, UD	Board No. 10 ш
3	Rescue bell cables and hoses reel ВЭС-4	МАП --11--4/8	1/0.5	1	Cam Controller	КВ-1521	1	Suprstr top, UD	Board No. 8 ш
4	Rescue bell hose reel ВЭС-5	МАП --11--4/8	1/0.5	1	Cam controller	КВ-1521	1	Suprstr top, UD	Board No. 8 ш
5	Pump for hydraulic system	МР-51--2-83	8	2	Magnetic starter Button station	ПМ-3112 КУ-103--2	2 2	A.E. room Suprstr top, UD	Board No. 13 ш

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AFT DIVING AND ANCILLARY APPLIANCE

No.	Description	Electric Motor Type	Power	Qnty	Control Equipment Description	Type	Qty	Location	Power Source
1	Type drum-reel B3C-6 for diving bell cables and hoses	MAP-11-4/8	1/0.5	2	Cam controller	KB-1521	2	Superstructure top, UD	Board No. 10[illegible]
2	Diving bell winch BL-3-46	AP M-32 (actuating)	16	1	Controller	PBT-5128	1	Raised platform on superstructure top	Three emergency unit
3	Davit	MAP-11-4/8	1/0.5	1	Magnetic starter	PM-1111	1	Tiller room	
					Universal switch	YP-5212-J1 540	1	Davit pedestal socket	Board No. 10[illegible]
4	Winch BL3C1-3 for observation chamber HK-300	MAP-211-4/12	5.0/1.7 kW	1	Cam controller	KB-1820	1	Raised platform, fr.102	Board No. [illegible]
5	Reel B3C10-2 for observation chamber HK-300	MAP-112-4/12	3.0/1.7 kW	1	Cam controller	KB-1820	1	Raised platform, fr.102	Board No. [illegible]

Power Supply for Rescue Equipment

To provide D.C. supply for the diving and rescue bells and underwater illumination, three groups of alkaline storage batteries are installed in the aft engine room, each storage battery consisting of 7 cells, type 10KH-125K, connected in series.

These batteries coninuously supply the respective consumers. One group of storage batteries is in operation, the second being in condition of readiness for operation, and third being charged.

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NAVIGATIONAL AIDS

Gyro Compasses

Type: KYPS-4 (KYPC-4)

1. Number of gyro compasses .. .. 1 set
2. Total number of receivers installed aboard ship .. .. 11 pcs including:
in the gyro compass system:

(a) repeaters on two-horn mounts .. .. .. 2 pcs
(b) repeaters on peloruses .. .. .. 2 pcs
(c) course recorder .. .. .. 1 pc
(d) navigator's console .. .. .. 1 pc

in other systems:

(e) autopilot, A.C. current .. .. .. 1 pc
(f) radars APN-509-1.2M and DOK (A OH), A.C. current .. .. 2 pcs
(g) sonar, A.C. current .. .. .. 1 pc
(h) degaussing arrangement, A.C. current .. .. 1 pc

3. Time necessary for the gyro compass to seek the meridian:

- at normal starting for latitudes of 45 - 60° .. .. not over 6 hrs

- at fast starting .. .. not over 1 hr

4. Gyro compass error when running on a continuous straight course ± 1°

Power Supply Sources

Basic Parameters

Description	Motor	Generator
Inverter, type AM -2016	-	-
Current	Three-phase, A.C.	Three-phase, A.C.
Voltage	220 V	120V
Frequency	60 cps	330 cps
Power	1144 W	435 W

Additional Data

To ensure normal operation of the gyro compass, provision is made aboard ship for a cooling system. The liquid of the cooling system is cooled by the outside water supplied from the outside water piping or by the water supplied from the fire-fighting system.

In the event of emergency the gyro compass cooling pipe is supplied with the fresh water directly from the fresh water piping.

Magnetic Compasses and Compensating Arrangements

Types of Magnetic Compasses YKП -41 and YKП -43

1. Number of compasses .. .. .. 2 sets

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including:

(a) master compass Ykn -M1 .. .. .. 1 pc
(b) steering compass Ykn -M3 .. .. .. 1 pc
2. Number of compensating arrangements KYC-12V .. 2 sets

Each compass is provided with a compensating arrangement. The compensating arrangements are independently supplied with power from the terminal boxes of article "55".

3. The compasses are provided with the bottom lighting system, the voltage of 24V being fed from:

(a) emergency lighting mains, 24 V, D.C. ;
(b) ship's mains, 24V, A.C.

L o g

Type : MGL-35

1. Number of logs .. .. .. 1 set
2. Total number of receivers installed aboard ship .. 2 pcs including:

(a) speed indicator
(b) miles counter .. .. .. 1 pc
(c) combination instrument (incorporated on the navigator's console) .. .. .. not installed
.. .. .. 1 pc

3. Senitivity - steady indications are displayed at speeds beginning from 5 knots.
4. Power supply source - ship's mains, single-phase, 110V, A.C. 50 cps, from board No. 19Ш

E c h o - S o u n d i n g M a c h i n e

Type: НЭЛ -5

1. Number of echo-sounding machines .. .. .. 1 set
2. Transducers:
- emitter .. .. Gr. 45 1/2, P
- receiver .. .. Gr. 48 1/2, P
3. Distance between transducers .. .. 1.5 m
4. Depths measured:
- maximum .. .. .. 2000 m
- minimum .. .. .. 1 m
5. Echo-sounding machine operates steadily:
- at speeds up to .. .. 20 knots
- at rolling .. .. up to 10°
- at pitching .. .. up to 1.5°
6. The echo-sounding machine derives power from the ship's mains, single-phase 220V, A.C., 50 cps, board No. 1Ш

R a d i o D i r e c t i o n F i n d e r

Type : АРП -50Р-1.2М

1. Wave ranges .. .. .. 1650 - 830 m,
800 - 400 m,
1100 - 940 m,
2. Accuracy in taking bearings .. .. .. ± 1°
3. Time of continuous operation .. .. .. 12 hrs
4. Power supply source .. .. .. ship's mains, single phase, 220V A.C., 50 cps, board No.1Ш

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Annunciator Set

Type : KASHTAN
Power - 25 VA
Number of loudspeakers - 41 pcs
Types of loudspeakers - ГР-1 - 4 pcs;
ГР-3 - 16 pcs;
ГР-4 - 21 pcs

Number of microphone stations - 1 pc

Frequency range of receiver VOLNA-K1 (ВОЛНА-К1)
m/kc,s - $\frac{25000 - 5000}{12 - 60}$; $\frac{3000 - 1670}{100 - 180}$;

$\frac{1671 - 910}{180 - 330}$; $\frac{910 - 500}{330 - 600}$;

$\frac{500 - 272.5}{600 - 1100}$; $\frac{272.5 - 187.5}{1100 - 1600}$

$\frac{60 - 33.4}{5000 - 9000}$; $\frac{33.4 - 20}{9000 - 15000}$

$\frac{20 - 13}{15000 - 23000}$

Electric Megaphones

Type: ЭМ-2

Number - 2 pcs

Consumed power - 9.6 W

Duration of continuous operation when supplied with power from storage battery - 1.5 hrs

Operating range - 200 - 300 m

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Arrangement of Radio Communication Facilities

No.	Spaces	Radio communication facilities (including remote communication stations and microphone stations)	Qnty	Remarks
1	Radio room (upper deck, frs 40 - 45)	Transmitter P-644A	1 set	
		Transreceiver P-609M	2 sets	
		Receiver VOLNA-K	2 sets	
		Alarm signals automatic receiver АПМ-54	1 set	
		Frequency-meter heterodyne 526Y	1 set	
		Switchboards ПРО and ВПС, type КП B-5, with rectifier BC-25 and tone generator ТГП-2	1 set	For КП B-5
		Transmitting antenna switchboard	1 pc	
		Receiving antenna switchboard	1 pc	
		Broadcasting unit without receiver and phonograph, type ТП-2	1 pc	In KASHTAN set
		Remote microphone МС-8	1 pc	
		Receiver VOLNA-K1	1 pc	
		Electric record-player, type ЭП	1 pc	
2	Pilot house and chart room (suprstr)	Remote communication station	1 pc	In P-644A set
		Loudspeaker with amplifier	1 pc	
3	Storeroom No.3 (platform, frs 18 - 22,P)	Radio station SHLYUP-M	1 pc	

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Antennae and Their Arrangement

No.	Type	Purpose (transmitting or receiving)	Location	Remarks
1	Γ - shaped one beam antenna, lr - 7 m, 16 - 6 m	Transmitting	Mast - funnel	Feeder 1 - 15.5 m (PKC-10)
2	Rod antenna, H - 6 m	Transmitting	Funnel	Feeder 1 - 20.5 m (PKC-10)
3	Rod antenna, H - 6 m	Receiving	Roof of pilot house and chart room	Feeder 1 - 16 m (PK-4)
4	Rod antenna H - 6 m	Receiving	Roof of pilot house and chart room	Feeder 1 - 15 m (PK-4)
5	Symmetrical dipole	Receiving - transmitting, USW	Mast, SB and P yard arm	Feeder 1 - 35 m (PK-4)
1	Prototel-type jack	For installation of 6-m rod or USW strut with disk-cone antenna	Upper deck, CL, fr. 60	Feeder 1 - 16 m (PKC-10)

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COMPOSITION AND ARRANGEMENT OF ELECTRONIC EQUIPMENT

No.	Name and designation of stations	Location (space and frames No.)			
		Antenna, radiator, reflector (height above deep WL)	station apparatus	remote indicators	power supply units
1	IFF radar ЗАКЪЛ-МО (ФАКЭЛ-М)	Antenna АСК on top, on special truss, h - 1.85 m	Pilot house and chart room, superstructure, fr. 43, P		
2	Radar DON (АОН)	Instrument "А" on upper access board of mast, h - 16m	Room units, pilot house and chart room, superstructure, frs 38 - 48		АПА-1.5"-Б1, radar power room, frs 38-44, (hold)
3	Sonar МГ-11		Sonar compartment, frs 16 - 22 (hold), and sonar room, UD, frs 35-40, SB	Pilot house and chart room	
4	Sonar МГ-15	) Room No.6 for sonars КАМА) and МГ-25, frs 22-28) (hold), sonar room on UD,) frs 35-40, SB. Pilot) house and chart room.) Room for ПОУ-11			
5	Sonar КАМА (КАМА)				
6	UW TV equipment АП Т-2П		Room for UW TV equipment, UD, frs 49-63, P	Room for decompression chambers (UD, frs 100 - 110), ВК-75-1 pc	

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BASIC CHARACTERISTICS OF SEARCH RADAR

Type: Shipborne radar DOK

1.	Main purpose	to insure the safety of the ship's navigation
2.	Number of radars	1 set
3.	Wave length	about 3 cm
4.	Transport detection range	3000m 140 cables
5.	Error in determination of the course angle	$\sim 1^{\circ}$
6.	Dead zone	not over 45 - 50 m
7.	Time of bringing the radar into readiness	not over 5 min.
8.	Time of continuous operation	24 hrs
9.	Crew	1 man
10.	Power supply source	A.C. converter 3 ФЛ 4-1.5Ч-5

Note : Indicated in Paras 4 and 5 are the data obtained at trials.

SURVEILLANCE EQUIPMENT

A. IFF Radar

1.	Name and type	ЧАКЕЛ-МО
2.	Purpose	for IFF purpose
3.	Number of stations	1 set
4.	Time of continuous operation	24 hrs
5.	Power supply source	ship's mains, 220 V, A.C., 50 cps

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(13)

B. Sonar Equipment

1.	Sonar designation	MG -11
2.	Purpose	to detect submarines and take bearings on them when in submerged position; to detect mine fields and single mines; to detect sound-producing objects and take bearings on them; to determine slant ranges
3.	Echo ranging of submarine proceeding at speed of 4 knots (with the ship running at speed of 17 knots)	20 cables
4.	Range of sound listening of submarine proceeding at speed of 5 knots (with the ship being at stop)	40 cables
5.	Course angles which allow direction finding:	
	- in step scanning	160°, P and SB
	- in mine searching duty	160°, P and SB
6.	Depth of dome (below BL) :	
	- in lowered position	1625 mm
	- in raised position	dome is in trunk and does not protrude beyond bottom line
7.	Sonar system stabilization	by gyro compass [illegible]-4
8.	Systems obtaining data from sonar	sonar does not transmit data to any system
9.	Time required for lowering and raising dome :	
	(a) by motor:	
	- lowering	not over 80 sec
	- raising	not over 80 sec
	(b) manually:	
	- lowering	not over 20 sec
	- raising	not over 20 sec
10.	Time of continuous operation	96 hrs (for recorder - 12 hrs)
11.	Crew	2 men
12.	Power supply source	ship's mains, three phase, 220V, AC 50cps
13.	Power consumed:	
	- echo ranging	3 kW
	- sound listening	1.8 kW
14.	Weight with unit [illegible] OYA Y8M	2350 kg

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C. DETECTION AND COMMUNICATION SONAR

1.	Sonar designation	...	KAMA
2.	Purpose	...	to detect sunken submarine and provide communication with her personnel
3.	Number	...	1 set
4.	Operating frequency	...	according to Service Log of sonar
5.	Location of:		
-	hoisting and lowering unit	0 -11	common room with sonar M -15 (room No. 6 for sonars KAMA and M -15, frs 22 - 28, hold)
	Sonar room	Superstructure frs 35-40 std.	
6.	Depth of dome (below keel):		
-	in lowered position	...	785 mm
-	in raised position	...	dome is in trunk and protrudes beyond bottom line by 100 mm
7.	Lowering of communication channel oscillator	...	from forecastle deck, stbd, ~~xxx~~ fr. 16
8.	Accuracy of determination of relative bearing on submarine (which gives distress signals by striking the hull) with the help of detection channel	...	$\pm 15^{\circ}$ at speed of 5 knots
9.	Accuracy of fixing position of submarine which gives distress signals by striking the hull	...	± 70 m at speed of 5 knots
10.	Range of voice transmission and reception of repeating signals through communication and detection channels at stop:		
	(a) range of reception of repeating signals through communication channel	...	5 cables
	(b) range of reception of repeating signals through detection channel	...	5 cables
11.	Range of voice transmission and reception of repeating signals through communication and detection channels with the ship at movement by inertia at speed of 5 knots:		
	(a) range of voice transmission through communication channel	...	3 cables
	(b) range of reception of repeating signals through communication channel	...	3 cables
	(c) range of reception of repeating signals through detection channel	...	3 cables
12.	Time of continuous operation in echo ranging duty	...	24 hours

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13. Complete starting time	...	2 min
14. Time of lowering raising the dome:		
- by motor	...	1 min
- manually	...	20 min
15. Crew	...	1 man
16. Power supply source	...	ship's mains, three-phase, 220V, A.C., 50 cps
17. Weight of complete set with spare parts (unit MGY -11 included)	...	1690 kg

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D. UNDERWATER COMMUNICATION SONAR

1. Sonar designation	...	MG -15
2. Purpose	...	to provide nondirectional telephone (or telegraph) communication between surface ship and submarine and to find distance between ships equipped with sonar MG -15 after establishment of communication between them
3. Number	...	1 set
4. Operating frequency	...	according to Service Log of sonar
5. Location of :		
- hoisting and lowering unit Moy -11	...	common space with sonar KAMA(room No.6 for sonar KAMA and MG -15, frs 22 - 28, hold)
- sonar room	...	superstructure, frs 35 - 40, stbd
- remote instruments	...	pilot house and chart room, frs 38 - 48
6. Depth of dome (below keel):		
- in lowered position	...	785 mm
- in raised position	...	dome is in trunk and projects beyond bottom line by 100 mm
7. Range of two-way nondirectional communication between surface ship and submarine:		
(a) at surface ship speed of 15 knots and submarine speed of 10 knots	...	100 cables
(b) at surface ship speed of 15 knots and submarine speed of 4 knots	...	120 cables
8. Range of measuring distance between ships maintaining communication	...	corresponds to range of reliable telegraph communication
9. Range of two-way nondirectional telephone communication between surface ship and submarine:		
(a) at surface ship speed of 15 knots and submarine speed of 10 knots	...	30 cables
(b) at surface ship speed of 15 knots and submarine speed of 4 knots	...	50 cables
10. Time of continuous operation:		
- in termin transmission duty	...	1.5 hrs
- in reception duty	...	96 hrs

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11. Full time of starting for operation in communication duty ... not over 5 min

12. Time of lowering raising the dome:

- ~~mark~~ by motor ... 1 min
- manually ... 20 min

13. Crew ... 1 man

14. Power supply source ... ship's mains three-phase, 220 V, A.C., 50 cps.

15. Weight of sonar set with spare parts ... 265 kg (weight of unit nov -11 is included into that of station KAMA)

Note: Indicated in Paras 7 (a, b) and 9 (a, b) are the data obtained at trials.

POWER SUPPLY SOURCES OF ELECTRONIC EQUIPMENT

Name and purpose of power supply unit	Motor			Generator			
	power, kW	voltage, V	current, A	power kW	Voltage, V	current, A	frequency
Motor-generator A A-1.5M-61 inverting of 220 V, A.C., 50 cps into voltage of 230 V, 427 cps. It is included into set of radar DON	2.4	220	8	1.5	230	8.1	427

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UNDERWATER SEARCH EQUIPMENT

GENERAL

In tailed aboard the ship of design 5323 is the following underwater search equipment:

1. МГ-11 - for detection of and taking bearings on submersed submarines, mine fields and single mines; for detection of and taking bearings on sound-producing objects; for determination of slant ranges

2. МГ-15 - for nondirectional telephone (or telegraph) communication or surface ship with submarine and determination of distance between ships (equipped with station МГ-15) after establishment of mutual communication.

3. КАМА - for detection of submarine and communication between surface ship and personnel of sunken submarine

4. АПТ-2П - for investigation of underwater objects by divers and for photographing, when necessary

UW TV EQUIPMENT

1.	Designation	...	АПТ-2П
2.	Purpose	...	investigation of underwater objects by divers and their photography, if required.
3.	Number	...	1 set
4.	Time of continuous operation	...	12 hrs
5.	Power supply source	...	220 V, A.C., 50 cps
6.	weight	...	450 Kg (without spare parts)

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VENTILATION

(BRIEF DESCRIPTION)

The utility, auxiliary, working, and domestic spaces are provided with mechanical and natural ventilation.

The living and working spaces, dispensary, stations, wardroom, and crew mess are provided with plenum supply of air partially cooled to a temperature of 20 - 22°C. For spot ~~xxxx~~ cooling of the working places in the galley the air is cooled to a temperature of +25°C.

The natural air supply is effected through mushrooms, ports, doors, hatches, and covers.

Available aboard ship are two portable electric blowers to be used in the event of failure of the stationary blowers and for ventilation of non-ventilated rooms where welding, painting, and other operations are carried out. Besides, the ship is furnished with 22 table fans.

To make the ventilation more efficient, provision is made for wind catchers in the spaces having ports.

To insure normal conditions for work of the personnel and normal operation of the machinery and boiler in the fore and aft engine rooms, provision is made for plenum and natural exhaust ventilation as well as for spot air cooling of the control stations.

All stationary blowers are installed on shock absorbers AKCC.

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BASIC AUXILIARY MECHANISMS

No.	Description	Type	Qnty	Capacity or power of one unit	Drive Power
1	Diesel generator	AГ -200/ITB	2	200 kW	300 hp) x)
2	Diesel generator	AГ -100/ITB	2	100 kW	150 hp)
3	Diesel Compressor	Ak -2	3	8 lit/min	64 hp xx)
4	Electric compressor	3K2-150/1	1	2 lit/min	7.5 kW
5	Fuel delivery pump	3MH3/3-1	2	3.3 m^3/hr	2.2 kW
6	Oil extraction pump	3MH3/3-1	1	3.3 m^3/hr	2.2 kW
7	Fuel transfer pump	3MH16.5/3-I	1	16.5 m^3/hr	6 kW
8	Oil scavenging pump	3MH16.5/3-I	2	16.5 m^3/hr	6 kW
9	Boiler feed pump	NAГ 2/20A	1	2.5 m^3/hr	-
10	Hand pump	MP-20	6	12 lit/min	-

Note: x) The power of the diesel generators is indicated for the temperature of the air being sucked of + 20°C.

xx) The data are indicated for the temperature of the air being sucked of + 20°C and the final pressure of 230 kgf/cm^2.

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POWER SUPPLY SOURCES

(Shipborne Power Station)

Description	Primary power supply sources	Auxiliary power supply sources
I. Engines:		
1. Type	7 A 12	A6C-150
2. Number	2	1
II. Generators:		
1. Type	MC-128-4TM	MC-117-4TM
2. Number	2	1
3. Power(of one generator), kW	200	100
4. Current	A.C.	A.C.
5. Voltage, V	230	230
6. Speed, rpm	1500	1500
7. Excitation system	with attached exciter MBC-18/10	With attached exciter MCB-18/6
8. Short-circuit and overload protection	Circuit breaker, series AC	Circuit breaker, series AC

Note: The generator power is indicated for the temperature of the air being sucked of +20°C.

TOTAL POWER CONSUMED BY SHIP WITH 5-PERCENT ALLOWANCE FOR LOSS IN CIRCUIT

Diving work and rescuing submarine's personnel		Running duty		Weighing anchor, anchoring, and buoy moorings.		Anchorage by day		Anchorage at night		Emergency duty (failure of fore switchboard room)	
P kW	Q kvar	P kW	Q kvar	P kW	Q kvar	P kW	Q kvar	P kW	Q kvar	P kW	Q kvar
228	171	205	154	202	164	145	126	103	72	148	69

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POWER CONVERTERS

No.	Converter	Cnty	Current	Powers kW	Voltage, V	Purpose
1	Selenium rectifier, type BCA-12	1	A.C./D.C.	1.44	220/36	Charging the storage batteries
2	Selenium rectifier, type BCC-13	1	A.C./D.C.	1.15	220/230	Illumination of sunken submarine.
3	Selenium rectifier, type BCC-21	1	A.C./D.C.	8.65	220/115	Charging the storage batteries and emergency supply of power to diving electrical equipment

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MAIN ELECTRIC DRIVES

Drive	Qnty	Electric motor			
		type	current	power kW	Voltage V
1. Winch ЛО С3-1	1	КАМА МАП -22-4/12	A.C. three-phase	5/1.7	220
Pumps of fire-fighting and dewatering systems					
1. Fire pump НЦВ-63/80	3	АМ-72-2Т		25	220
2. Water discharge pump НЦВ-160/10	4	МАФ -85--53/4		7.5	220
3. Water discharge pump ВПЭН-100/I	1	МАП 3ф-21.9	AC, three phase	10	220
4. Water discharge pump ЭСН-16/I	2	built-in		3.6	220
Ship control electric drives					
Propeller BPШ	2	ДП М-21 (actuating)	D.C.	5.5	220
Auxiliary machinery electric drives					
1. Oil extraction pump	1	АОМ -41-4		2.2	220
2. Pump for scavenging refrigerator and distilling plant	1	АОМ -41-2		4	220
3. Oil scavenging pump	2	АМ -62-6		6	220
4. Fuel delivery pump	2	АОМ-41-4	A.C. three phase	2.2	220
5. Fuel transfer pump	1	АМ -62-6		6	220
6. Compressor	1	МР3К-54-6ТМ		7.5	220
7. Compressor МАКФУУ -180/I	1	АМ -92-4		55	220
8. Brine pump	1	АМ61-2		11	220
9. Cooling pump	1	АМ52-2		8	220
Domestic services					
1. Grind stone	1	МАП -32/2М		0.4	220
2. Thread-cutting lathe	1M1	АП -32/4 &	ПА-22(pump)	1.0 & 0.125	220 & 220
3. Refrigerating plant	2	АМ 51-6		3.2	220
4. Potato peel r, tyre КМО-1	1	АОМ -22-4	AC three phase	0.7	220
5. Sea water pump	1	АОМ-41-2М201		3.2	220
6. Fresh water pump	1	АОМ-41 2М201		3.2	220

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SEARCHLIGHTS

1. Purpose	Signalling and searching	Illumination of open decks and water areas	Signalling
2. Type	МСНП -45	ПЗС-35	МСНП -125, МСНП -250
3. Number	1	5	МСНП -125 - 1 МСНП -125 -1
4. Location	Mast	2 pcs - mast 2 pcs - suprstr, aft part 1 pc - pilot house top	Signalman's bridge
5. Method of control	Manual	Manual	Manual
6. Operational range	60 Km	-	-

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ADDITIONAL DATA

ON DIVING AND ANCILLARY APPLIANCE CUTTER

ELECTRICAL EQUIPMENT

SURFACE DIVING AND ANCILLARY APPLIANCE

No.	Description	Electric Motor Type	Power	Qnty	Control Equipment Description	Type	Qnty	Location	Power Source
1	Rescue bell winch ЛЭГР-5/1-1	МАП -52/4/12/24К	20/7.2/2.2	1	Magnetic controller Cam controller	ВТ-73 КВ-0014	1 1	Suprstr top, UD	Board No. 8 ш
2	Unloading core winches ЛЭ СЗ-1 and ЛЭ СЗ-2	МАП -22--4/12К	5/1.7	2	Cam controller	КВ-1523	2	Suprstr top, UD	Board No. 10 ш
3	Rescue bell cables and hoses reel ВЭС-4	МАП --11--4/8	1/0.5	1	Cam Controller	КВ-1521	1	Suprstr top, UD	Board No. 8 ш
4	Rescue bell hose reel ВЭС-5	МАП --11--4/8	1/0.5	1	Cam controller	КВ-1521	1	Suprstr top, UD	Board No. 8 ш
5	Pump for hydraulic syster	МР-51--2-83	8	2	Magnetic starter Button station	ПМ-3112 КУ-103--2	2 2	A.S. room Suprestr ton, UD	Board No. 13 ш

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AFT DIVING AND ANCILLARY APPLIANCE

No.	Description	Electric Motor: Type	Electric Motor: Power	Electric Motor: Qnty	Control Equipment: Description	Control Equipment: Type	Control Equipment: Qty	Control Equipment: Location	Power Source
1	Two-drum-reel B3C-6 for diving bell cables and hoses	МАП-11-4/8	1/0.5	2	Cam controller	КВ-1521	2	Supstre top,UD	Board No. 10
2	Diving bell winch ВЛ-3-46	ДП М-32 (actuating)	16	1	Controller	ПБТ-5128	1	Raised platform on superstr top	Three machine unit
3	Davit	МАП-11-4/8	1/0.5	1	Magnetic starter	ПМ-1111	1	Tiller room	
					Universal switch	УП-5212-Л 540	1	Davit pedestal socket	Board No. 10
4	Winch ВЗС1-3 for observation chamber НК-300	МАП-211-4/12	5.0/1.7 kW	1	Cam controller	КВ-1820	1	Raised Raised platform, fr.102	Board No.
5	Reel ВЗС10-2 for observation chamber НК-300	МАП-112-4/12	3.0/1.7 kW	1	Cam controller	КВ-1820	1	Raised platform, fr.102	Board No.

Power Supply for Rescue Equipment

To provide D.C. supply for the diving and rescue bells and underwater illumination, three groups of alkaline storage batteries are installed in the aft engine room, each storage battery consisting of 7 cells, type 10КН-125К, connected in series.

These batteries continuously supply the respective consumers. One group of storage batteries is in operation, the second being in condition of readiness for operation, and third being charged.

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